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Subject: Comments on Report NIST NCSTAR 1, WTC Investigation

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Report Number: NIST NCSTAR 1, WTC Investigation

General Comments - The primary focus of the findings and recommendations of the NIST with regards to the WTC investigation revolves around building design, construction, and operation. While these are critical areas of focus, for this report to truly be effective in saving lives, these findings must also include in depth and comprehensive recommendations regarding **tenant** life safety training.

Many of the study's findings can effect improvements on future construction. However, the one recommendation that would have the greatest impact on the thousands of existing buildings across the nation would be establishing a national standard for tenant training in high rise office buildings. Currently, the FDNY is preparing a final draft of 'Rule 3 RCNY 6-02' that will require all office buildings in NY to develop non-fire Emergency Action Plans. This rule requires building owners to educate building occupants on the emergency procedures contained in the plan. The NIST study is an excellent forum for determining a national standard on tenant training, but the education of building occupants continues to be overlooked throughout the industry, and is primarily overlooked in this report, as the training recommendations section 9.2.8 focuses on building and fire safety professionals only.

While it seems very reasonable that tenant education must be a key focus of any national standard attempting to improve the level of safety in tall office buildings, this study has not made this critical area of life safety training and risk management a top priority.

Please consider the following facts from **Section 8.4.2, pg. 238**:

- Two-thirds of WTC 1 and WTC 2 occupants participated in at least one fire drill in the twelve months prior to September 11, 2001. Nearly all (93 percent) of these occupants were **instructed** about the location of the nearest stairwell.
- Occupants were often unprepared to encounter transfer hallways during the stairwell descent. Groups of evacuees occasionally hesitated or debated a course of action upon encountering a transfer hallway.

Tenant education, including the distribution of building information, emergency procedures for a variety of scenarios, and education on the location of multiple exit stairwells are a few of the critical elements that must be included in a comprehensive tenant education program. Emergency procedures brochures, building diagrams, online training programs, and drills are a few of the tools that can be used to educate building occupants.

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Page Number: Section 9.2.8 - Education and Training - pg 272

Paragraph/Sentence: Sentence one, opening paragraph

Comment: The education and training recommendations need to include a section addressing tenants and building occupants AND focus on more than just building evacuation. For many emergencies, evacuation is not the proper action. However, evacuation is the only training activity mentioned in this report.

Reason For Comment: This section recommends a national training effort for building and fire safety professionals, but ignores the necessity for a national training and education initiative designed for the thousands of building occupants in office buildings.

Suggestion For Revision: Addition of a second sentence to the opening paragraph. **"Furthermore, a national training and education effort shall be initiated to better train the occupants of tall office buildings on the correct response in emergency situations."**

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Page Number: Section 9.2.8 - Education and Training - pg 272

Paragraph/Sentence: Addition of Recommendation 31

Comment: Tenant training and education is currently not included in the **Education and Training** recommendation section.

Reason For Comment: The fastest way to help save lives in the thousands of existing high rise office buildings is to implement a tenant training and education program.

Suggestion For Revision: Recommendation 31. NIST recommends that a national education and training initiative be created to teach the tenants of office buildings the correct response to a variety of emergency scenarios including building evacuation and shelter in place. Building owners and managers shall educate tenants on the life safety systems present in their building, provide training materials explaining egress routes and stairwell information, and develop educational programs explaining the correct response in emergency situations. It is further recommended that the owners and managers of high rise office buildings implement the necessary systems for collecting and storing the training history of each building occupant.

Thank you for your consideration,

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****About AK:** Founded in 1981, AK Productions LLC has grown into the country's leading provider of customized, cost-effective life safety and security training programs and materials for commercial office buildings. Visit us on the Web at www.akproductions.com.